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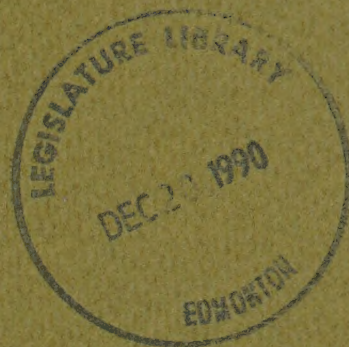
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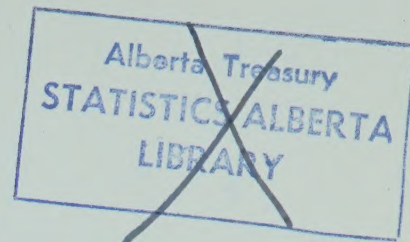
THE
CANADIAN MARKET
FOR
RAPESEED MEAL
December, 1969



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FOR
RAPESEED MEAL
December, 1969



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Minister
Hon. R. S. Ratzlaff

Deputy Minister
R. G. McFarlane

I. USE OF RAPESEED MEAL AS A HIGH PROTEIN FEED

The rapeseed meal, which is the residue left after the oil has been pressed out of the seeds, is a high protein feed. It is used in a variety of ways, such as in the form of a supplement to the ration, or as a complete feed for certain types of livestock. The rapeseed meal is a very good source of protein, and it is also a good source of energy. It is a very good feed for all types of livestock, and it is especially good for the young of the species. The rapeseed meal is a very good feed for all types of livestock, and it is especially good for the young of the species.


THE CANADIAN MARKET FOR RAPESEED MEAL

I. USE OF RAPESEED MEAL AS A HIGH PROTEIN FEED

II. LIVESTOCK NUMBERS IN CANADA

III. FEED MANUFACTURERS IN CANADA

IV. POTENTIAL MARKET FOR RAPESEED MEAL



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I. USE OF RAPESEED MEAL AS A HIGH PROTEIN FEED

The rapeseed meal that is left following oil extraction is used as high-protein feed. The protein level varies from 32 to 42 percent with an average content of 37 percent. Rapeseed meal can be used as a substitute for linseed meal, soybean meal, and any other plant protein supplement in livestock and poultry rations.¹ The crude fiber level of rapeseed meal averages approximately 12 percent, which is somewhat higher than that of soybean meal. The amino acid composition of rapeseed meal compares favourably with that of soybean meal.

Early studies carried out with expeller-processed rapeseed meal showed adverse effects on the growth and reproduction of certain species of animals. However, as most Canadian crushing plants now use either a pre-press solvent, or a direct solvent extraction process the quality of rapeseed meal has been greatly improved. With either of these two modern processing methods the growth promoting properties of the meal have been greatly improved.

Research studies have now established that the following levels of rapeseed meal in animal feeds will produce results equal to corresponding levels of soybean meal.² For dairy cattle, beef cattle and sheep, up to 10 percent of the total ration may be rapeseed meal. The recommended level for young pigs up to 50 pounds weight, is 4 - 5 percent; but for market pigs the meal may be used up to 10 percent of the total ration. In poultry feeds, 10 - 15 percent rapeseed meal may be used in chick

1. Oil and Oil Meal from Canadian Rapeseed, Canada Department of Agriculture. Publication 1183, (Ottawa, 1967), p. 11.

2. Bowland, Dr. J.P., Rapeseed Meal For Livestock, Feedstuffs, Vol. 38, No. 21, (May 28, 1966), p. 50.

starter rations, while 5 - 10 percent rapeseed meal for laying and breeding chickens and turkeys have been shown to be satisfactory when compared to corresponding amounts of protein from soybean meal.

Rapeseed meal, due to the poor quality of early expeller processed meal, is not as widely accepted as soybean meal. Because of this, rapeseed meal has not achieved its full potential as a high protein feed. On the basis of quality, availability and price, rapeseed meal is competitive with other forms of protein supplements.

II. LIVESTOCK NUMBERS IN CANADA

The information provided on Tables 1, 3, 5 and 6 show that the eastern provinces possess 56 percent of all hogs, 65 percent of all poultry, 50 percent of all sheep and 44 percent of all cattle in Canada. Due to the availability of other feed ingredients in western Canada, oats, barley and wheat, plus the amounts of livestock raised in eastern Canada, it is estimated that at present 70 percent of the potential market for rapeseed meal is in eastern Canada, with over 80 percent of this total in Ontario and Quebec.

The Canadian Agricultural Outlook Conference held in Ottawa in November 1969 stated that the current per capita consumption of beef was approximately 110 pounds in the U.S. and a little under 90 pounds in Canada, (see Table 8). Assuming an estimated per capita consumption by 1980 of 91 pounds in Canada and 114 pounds in the U.S. it will take an increase of 36 percent to meet the 1980 beef requirement for Canada and the U.S. combined.

The per capita consumption of pork in 1968 was approximately 68 pounds in the United States and 54 pounds in Canada. The total combined increase of over 1 million hogs per year should produce around 106 million hogs by 1980. Of this total, Canada should account for over 10 percent. This represents an annual growth of 400,000 hogs per year.

In the 10 year period 1959 to 1969 per capita consumption of chickens has increased from 22.0 pounds to an estimated 32.4 pounds or an average increase of 1 pound per year. On the basis of popu-

lation growth alone Canada could absorb an additional 10 million pounds of chicken in 1970. Turkeys are also predicted to show a substantial increase in 1970.

In general, we can expect continued growth in hogs, poultry and cattle. Sheep population should remain relatively stable over the next 10 years with a slight decline from present levels. The two major areas of growth in livestock will come from poultry and cattle.

TABLE 1

NUMBER OF HOGS ON FARMS IN CANADA AS OF SEPTEMBER 1st

Province	Y E A R					
	1964	1965	1966	1967	1968	1969
	(thousands of animals)					
Prince Edward Island	62.0	71.0	91.0	93.0	88.0	97.0
Nova Scotia	58.0	61.0	62.0	62.0	74.0	68.0
New Brunswick	46.0	40.0	36.0	41.0	50.0	53.0
Quebec	1,120.0	1,010.0	1,274.0	1,380.1	1,161.0	1,115.0
Ontario	2,050.0	1,960.0	2,048.0	2,080.0	1,965.0	2,050.0
Total Eastern Canada	3,336.0	3,142.0	3,511.0	3,656.0	3,338.0	3,383.0
Manitoba	505.0	460.0	582.0	610.0	560.0	650.0
Saskatchewan	540.0	430.0	547.0	617.0	540.0	680.0
Alberta	1,450.0	1,300.0	1,248.0	1,325.0	1,288.0	1,332.0
British Columbia	42.0	38.0	35.0	43.0	43.0	45.0
Total Western Canada	2,537.0	2,228.0	2,412.0	2,595.0	2,431.0	2,707.0
TOTAL ALL CANADA	5,873.0	5,370.0	5,923.0	6,351.0	5,769.0	6,090.0

Source: Report on Livestock Survey,
 Dominion Bureau of Statistics,
 Catalogue No. 23 - 005.

TABLE 2

HOGS: ESTIMATED TOTAL OUTPUT AND SLAUGHTER - 1964-1969

<u>Year</u>	<u>Estimated Farm Output</u> thousands of head	<u>Total Cold Trimmed Weight</u> ¹ thousands of lbs.
1964	8,300.3	1,060,059
1965	7,940.5	1,006,533
1966	7,903.0	1,014,295
1967	9,182.2	1,181,470
1968	9,255.1	1,181,301
1969	8,747.1	1,134,496

NOTE: ¹ Not including fats and edible offal.

Source: Livestock and Animal Products Statistics - 1969,
Dominion Bureau of Statistics,
Catalogue No. 23 - 203.

TABLE 3

POULTRY ON FARMS IN CANADA AS OF JUNE 1st

Province	Y E A R					
	1964	1965	1966	1967	1968	1969
	(thousands of animals)					
Prince Edward Island	459.6	453.3	365.5	346.1	324.0	332.0
Nova Scotia	2,158.5	2,281.9	2,841.5	2,793.4	2,677.4	2,924.3
New Brunswick	1,086.6	1,182.4	1,397.6	1,406.8	1,447.7	1,566.7
Quebec	14,427.0	16,068.0	20,013.1	21,591.0	21,697.0	23,997.0
Ontario	27,571.0	27,260.0	29,549.7	31,333.0	29,392.0	31,478.0
Total Eastern Canada	45,702.7	47,245.6	54,167.4	57,470.3	55,538.1	60,298.0
Manitoba	7,248.0	6,960.0	7,100.7	7,420.0	7,415.0	8,345.0
Saskatchewan	6,840.0	6,150.0	6,278.3	6,530.0	5,805.0	6,050.0
Alberta	9,515.0	8,855.0	9,562.9	9,665.0	9,145.0	9,600.0
British Columbia	6,524.0	6,758.0	7,830.8	8,557.0	7,972.0	8,180.0
Total Western Canada	30,127.0	28,723.0	30,772.7	32,172.0	30,337.0	32,175.0
TOTAL ALL CANADA	75,829.7	75,968.6	84,940.1	89,642.3	85,875.1	92,473.0

Source: Report on the Poultry Survey,
 Dominion Bureau of Statistics,
 Catalogue No. 23 - 006.

TABLE 4

TOTAL POULTRY MEAT PRODUCTION BY PROVINCE
1964-1969

<u>Province</u>	<u>Y E A R</u>					
	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
	thousands of lbs.					
Prince Edward Island	1,166	1,424	1,262	1,135	825	1,065
Nova Scotia	16,572	17,114	20,038	19,662	19,242	21,643
New Brunswick	5,886	8,594	11,422	12,096	12,158	14,027
Quebec	181,607	206,839	236,423	252,983	258,771	300,658
Ontario	259,718	276,341	305,337	305,337	300,910	328,630
Total Eastern Canada	464,949	510,312	574,482	591,213	591,906	666,023
Manitoba	50,233	52,219	54,768	54,277	53,345	57,463
Saskatchewan	39,367	36,669	34,659	35,176	36,014	37,929
Alberta	64,770	62,152	69,477	71,373	65,168	69,185
British Columbia	46,409	48,729	57,058	61,633	60,198	64,543
Total Western Canada	200,779	199,769	215,962	222,459	214,725	229,120
Total All Canada	665,728	710,081	790,444	813,672	806,631	895,143

Source: Production of Poultry and Eggs,
Dominion Bureau of Statistics,
Catalogue No. 23 - 202.

TABLE 5

SHEEP AND LAMBS: NUMBERS ON FARMS AS OF JUNE 1st
1964-1969

<u>Province</u>	<u>Year</u>					
	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
	thousands of animals					
Prince Edward Island	18.0	16.0	15.1	14.5	12.2	11.0
Nova Scotia	47.0	42.0	38.8	38.0	39.0	41.0
New Brunswick	35.0	32.0	28.2	27.0	27.0	25.0
Quebec	140.0	128.0	112.4	106.0	99.0	101.0
Ontario	292.0	280.0	265.4	259.0	252.0	262.0
Total Eastern Canada	532.0	498.0	459.9	444.5	429.2	440.0
Manitoba	72.0	61.0	50.5	46.0	41.0	41.0
Saskatchewan	153.0	140.0	127.8	120.0	118.0	126.0
Alberta	400.0	355.0	301.4	287.0	245.0	218.0
British Columbia	115.0	78.0	65.9	65.0	58.0	58.0
Total Western Canada	740.0	634.0	545.6	518.0	462.0	443.0
Total All Canada	1,272.0	1,132.0	1,005.5	962.5	891.2	883.0

Source: Livestock and Animal Products Statistics - 1969,
Dominion Bureau of Statistics,
Catalogue No. 23 - 203.

TABLE 6

CATTLE ON FARMS IN CANADA AS OF JUNE 1st

<u>Province</u>	<u>Year</u>					
	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
	(thousands of animals)					
Prince Edward Island	124.0	130.0	125.2	122.0	188.0	117.0
Nova Scotia	159.0	157.0	147.6	146.0	144.0	141.0
New Brunswick	153.0	150.0	136.5	131.0	130.0	128.0
Quebec	1,982.0	1,990.0	1,797.6	1,796.0	1,847.0	1,895.0
Ontario	3,303.0	3,344.0	3,137.0	3,165.0	3,220.0	3,204.0
Total Eastern Canada	5,721.0	5,771.0	5,343.9	5,360.0	5,459.0	5,485.0
Manitoba	1,139.0	1,150.0	1,151.2	1,112.0	1,037.0	1,019.0
Saskatchewan	2,300.0	2,340.0	2,398.0	2,368.0	2,223.0	2,180.0
Alberta	3,135.0	3,195.0	3,439.7	3,405.0	3,322.0	3,261.0
British Columbia	522.0	545.0	546.0	536.0	525.0	522.0
Total Western Canada	7,096.0	7,230.0	7,534.9	7,421.0	7,107.0	6,982.0
TOTAL ALL CANADA	12,817.0	13,001.0	12,878.8	12,781.0	12,566.0	12,467.0

Source: Report on Livestock Surveys,
 Dominion Bureau of Statistics,
 Catalogue No. 23 - 004.

TABLE 7

CATTLE AND CALVES: ESTIMATED TOTAL OUTPUT AND SLAUGHTER
1964-1969

<u>Year</u>	<u>Estimated Farm Output</u>	<u>Total Cold Dressed Weight</u>
	thousands of head	thousands of lbs.
Cattle		
1964	3,064.2	1,573,489
1965	3,741.3	1,749,949
1966	3,573.9	1,756,728
1967	3,351.2	1,738,631
1968	3,631.8	1,855,346
1969	3,366.4	1,801,347
Calves		
1964	1,246.5	141,042
1965	1,541.6	162,505
1966	1,375.8	141,321
1967	1,292.4	148,721
1968	1,273.6	134,738
1969	1,033.9	107,062

Source: Livestock and Animal Products Statistics - 1969,
Dominion Bureau of Statistics,
Catalogue No. 23 - 203.

TABLE 8

PER CAPITA DISAPPEARANCE OF MEAT AND EGGS IN CANADA
1964-1969

	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
	- pounds -					
Poultry ¹	35.0	36.6	39.3	40.7	39.7	42.8
Eggs ²	32.2	32.0	30.8	31.8	32.0	21.7
Beef ³	79.4	83.6	84.1	84.0	86.7	86.4
Veal	7.2	8.3	7.0	7.2	6.4	5.1
Mutton and Lamb	3.4	2.8	3.4	3.6	4.2	4.0
Pork	51.8	47.9	46.9	53.8	53.6	51.9
Canned Meats	4.5	4.2	4.7	4.7	4.7	4.6
Fish	12.9	13.1	12.9	13.4	-	-

NOTE:

1. Eviscerated weight.
2. Converted on the basis of 1 dozen eggs equals 1.5 lbs.
3. Basis cold dressed carcass weight base.

Source: Production of Poultry and Eggs - 1969,
Dominion Bureau of Statistics,
Catalogue No. 23 - 202.

III. FEED MANUFACTURERS IN CANADA

In 1967 the Dominion Bureau of Statistics reported 892 establishments in Canada as feed manufacturers. The Dominion Bureau of Statistics defines feed manufacturers as including all establishments which manufacture prepared feed, chopped grain feed on own account and carry on a service operation of custom milling and chopping.

TABLE 9

PRINCIPAL STATISTICS FOR FEED MANUFACTURERS BY PROVINCE 1967

Province	Estab- lishments	Manufacturing Activity		Total Activity	
		Cost of	Value of	Value	Value
		Material & Supplies	Shipments of Goods of Own Manufacture	Added	Added
		\$'000	\$'000	\$'000	\$'000
Newfoundland	2	*	*	*	*
P. E. I.	13	*	*	*	*
Nova Scotia	11	8,353	10,398	1,954	2,718
New Brunswick	13	7,770	9,395	1,501	3,133
Quebec	321	144,702	177,584	30,704	37,544
Ontario	356	157,104	207,734	47,491	55,987
Manitoba	44	19,767	25,444	5,291	6,010
Saskatchewan	15	6,005	7,750	1,615	1,767
Alberta	81	30,604	39,295	8,234	9,350
B.C.	36	28,564	35,733	6,674	8,537
TOTAL	892	405,251	516,518	104,191	125,898

NOTE: (*) indicates figures are confidential.

Source: Feed Manufacturers, 1967,
Dominion Bureau of Statistics,
Catalogue No. 32 - 214.

Feed manufacturers east of Manitoba account for 79 percent of the shipments of goods of own manufacture while the western one accounted for 21 percent.

In terms of materials purchased in 1967, rapeseed meal accounted for 54,139 tons valued at \$4.3 million. This represented an increase of over 15 percent from the 1966 purchases.

TABLE 10

MATERIAL PURCHASED BY FEED MILLS
1967

<u>Material</u>	<u>Quantity</u> tons	<u>Cost</u> \$'000
Grains	3,228,044	149,820
Flours and meal, edible	13,740	983
Grain by-products	797,233	65,903
Dairy by-products	25,113	5,580
Fishing by-products	70,473	8,669
Legumes and Grasses	151,948	5,859
Meat and tankage by-products	265,579	29,099
Minerals	160,759	7,574
Oils	4,854	724
Oilcake and oilcake meal:		
Linseed meal	25,257	2,348
Rapeseed meal	54,139	4,328
Soybean meal	421,806	44,478
Other oilcake and meals	10,424	829
Pulp and Pomace	35,227	1,912
Medicine, drugs, tonics, etc.	17,035	11,203
Miscellaneous material	157,083	11,667
TOTAL	5,438,714	350,976

Source: Feed Manufacturers 1967,
Dominion Bureau of Statistics,
Catalogue Number 32 - 214.

All oilcake and oil meals purchased in 1967 totalled 511,626 tons valued at \$52 million. This represented 15 percent of the value

of total purchases. Rapeseed meal represented 1.2 percent of the total value of purchases of materials.

In a 1970 publication 'Flour Mills and Feed Mills in Canada' the Dominion Bureau of Statistics lists the names of 1,127 feed mills in Canada. The following table shows a provincial break-down.

TABLE 11

FEED MILLS INCLUDING PREPARED FEED PLANTS IN CANADA - 1970

<u>Province</u>	<u>Number</u>
Newfoundland	2
Prince Edward Island	19
Nova Scotia	14
New Brunswick	12
Quebec	372
Ontario	480
Manitoba	53
Saskatchewan	17
Alberta	117
British Columbia	41
TOTAL	1,127

Source: Flour Mills and Feed Mills in Canada,
Dominion Bureau of Statistics,
Catalogue Number 32 - 401.

Of the total number of feed mills shown on Table 11, 288 are in western Canada while 899 or 80 percent are located in eastern Canada.

An estimate of the high protein feed supplies available in Canada is shown on Table 12. Rapeseed meal ranks fourth, as a source of high protein supplements, behind soybean meal, packing-house by-products, and brewer's and distiller's dried grain and malt sprouts. In 1969 high protein feed supplies represented 18 percent of the estimated feed potential of feed manufacturers' shipments. These shipments by feed manufacturers have been classified according to their destination and are listed on Table 13. This table shows that in 1969 eastern Canada received 68 percent of the shipments of estimated feed potential from pre-mixes, concentrates and complete feeds.

TABLE 12

ESTIMATE OF HIGH PROTEIN FEED SUPPLIES AVAILABLE IN CANADA

<u>Item</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968(1)</u>	<u>1969(1)</u>
			(thousands of tons)				
Vegetable Protein:							
Linseed meal	29	38	26	27	33	29	30
Soybean meal	443	452	460	479	552	535	608
Rapeseed meal	23	25	36	60	71	83	105
Other oilseed meals, glutenfeed	56	64	63	29	61(2)	64(2)	63(2)
Growers & Distillers dried grain and malt sprouts	109	112	128	147	154	159	160
Total Vegetable Protein	660	691	712	742	872	870	966
Marine Protein:							
Fish meal	38	23	32	49	51	70	46
Animal Protein:							
Packinghouse by-products	137	167	190	199	222	223	215
Skim milk, buttermilk & whey powders	19	19	19	16	19	19	19
Total Animal Protein	194	208	241	215	241	242	234
TOTAL PROTEIN SUPPLIES	854	899	953	1,006	1,164	1,182	1,246

Note: (1) preliminary and partly estimated

(2) other oil meals include sunflower, cotton seed and n.e.s.

Source: Coarse Grains Quarterly,
Dominion Bureau of Statistics,
Catalogue No. 22 - 001.

TABLE 13

ESTIMATED COMPLETE FEED POTENTIAL FROM PRE-MIXES AND
CONCENTRATES, TOTAL ESTIMATED FEED POTENTIAL FROM SHIPMENTS
OF PRE-MIXES, CONCENTRATES AND COMPLETE FEEDS BY MANUFACTURERS
ACCORDING TO DESTINATION

<u>Destination</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
	(tons of feed)			
Newfoundland	25,379	27,657	29,438	33,788
Prince Edward Island	94,930	75,921	72,329	75,900
Nova Scotia	164,013	174,778	174,196	179,116
New Brunswick	94,795	98,433	105,877	108,270
Quebec	1,608,112	1,734,944	1,781,383	1,874,149
Ontario	2,189,386	2,397,348	2,355,662	2,528,716
Total Eastern Canada	4,176,615	4,509,081	4,518,885	4,799,939
Manitoba	369,768	493,580	458,513	477,920
Saskatchewan	199,076	228,222	228,120	261,437
Alberta	1,011,500	1,104,955	1,153,056	1,235,215
British Columbia	279,964	285,484	257,545	297,162
Total Western Canada	1,860,308	2,112,241	2,097,234	2,271,734
TOTAL ALL CANADA	6,036,923	6,621,322	6,616,119	7,071,673

NOTE: This table combines the total finished feed equivalent available from the volume of pre-mixes, concentrated feeds and the total secondary or finished feeds manufactured from raw ingredients. This material is shown geographically by destination of manufacturers shipments.

Source: Shipments of Prepared Stock and Poultry Feeds,
Dominion Bureau of Statistics,
Catalogue No. 32 - 004.

IV. POTENTIAL MARKET FOR RAPESEED MEAL

An obvious indication that the potential market for rapeseed meal is considerably larger than the present production, can be seen from the size of Canadian imports of soybean meal. In 1968 imports of American soybean meal were 237,680 tons, an amount equal to 48 percent of Canada's 1969 domestic production of soybean meal.

TABLE 14

IMPORTS OF SOYBEAN MEAL BY PROVINCE

<u>Province</u>	<u>1964</u> <u>Quantity</u> tons	<u>1965</u> <u>Quantity</u> tons	<u>1966</u> <u>Quantity</u> tons	<u>1967</u> <u>Quantity</u> tons	<u>1968</u> <u>Quantity</u> tons
Newfoundland	95	30	70	171	-
Nova Scotia	160	175	1,124	-	40
Prince Edward Island	150	215	141	-	-
New Brunswick	935	870	685	445	1,802
Quebec	58,220	80,185	57,730	59,020	63,511
Ontario	112,910	114,800	83,049	77,899	95,546
Manitoba	29,530	30,680	35,693	40,214	33,500
Saskatchewan	375	640	4,000	415	899
Alberta	5,500	6,145	9,911	11,456	13,163
British Columbia	15,040	15,250	22,432	30,856	29,218
TOTAL	221,915	248,990	214,835	220,482	237,680

Source: Dominion Bureau of Statistics.

In order to estimate the total potential market for rapeseed meal we have applied currently recommended feeding levels for rapeseed

meal^{1,2} to the total estimated complete feed potential of manufacturers shipments of prepared feeds.

TABLE 15

ESTIMATED POTENTIAL MARKET FOR RAPESEED MEAL - 1969

Type of Feed	Total Estimated Feed tons	Recommended Usage for Rapeseed Meal per cent	Estimate Potential Market for Rapeseed Meal tons
Calf Feed	66,191	10	6,619
Cattle Feed:			
Beef	1,244,835	10	124,448
Dairy	1,312,577	10	131,258
Swine Feed	2,021,347	7	141,494
Poultry Feed:			
Chick Starter	85,283	-	-
Broiler	746,359	-	-
Growing, laying, etc.	1,158,766	5	57,938
Fattening & finishing	33,578	10	3,358
Turkey	359,968	10	35,997
Other Poultry	22,190	10	2,219
Other Complete Feed	21,266	5	1,063
Complete Feed Equivalent	7,072,360		504,394

The estimated potential market for rapeseed meal in 1969 was 504,394 tons or over four times the current production of rapeseed meal. This amount represents the amount of rapeseed meal that could be used in the preparation of livestock feeds.

¹ Oil and Meal from Canadian Rapeseed, Canada Department of Agriculture, Publication No. 1183, Revised 1967.

² Bowland, Dr. J. P., Rapeseed Meal for Livestock, Feedstuffs, Vol. 35, No. 21, (May 28, 1966), p. 50.

The continued growth of Canada's livestock industry should ensure that the potential market for rapeseed meal will remain considerably above the current production of the meal. While a major part of rapeseed meal produced in Western Canada is currently shipped to eastern Canada, including the Maritimes, the future will see that an increasing amount will be consumed in the western provinces. The gradual increase in cattle numbers in western Canada will provide an increasing domestic market for rapeseed meal in the prairie provinces.

Date Due

[illegible]

